THE HOUSEHOLD GOODS SHIPMENT AND STORAGE PROGRAM: THE PROBLEM OF LOSS AND DAMAGE OCCURRING IN CODE 4 SHIPMENTS

A thesis presented to the Faculty of the U.S. Army Command and General Staff College in partial fulfillment of the requirements for the degree

MASTER OF MILITARY ART AND SCIENCE

by

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This thesis investigates the current code 4 shipping method used when moving household goods from the continental United States to overseas locations. The investigation includes a comparison with the commercial industry method. A review of the DOD test conducted, using the commercial shipping method, was analyzed. Security measures used in code 4 shipments were also compared with the commercial industry standards. Research questions examined in this thesis are: (1) can the loose stow seavan method reduce loss and damage claims? (2) is there a better way to secure code 4 household goods shipments when moved overseas? (3) are there value added benefits to DOD for implementing new methods in overseas shipping. This thesis supports the premise that Military Traffic Management Command (MTMC) can reduce loss and damage claims occurring in overseas shipments by including the loose stow seavan method as an option to the personal property shipping office (PPSO). Value added benefits realized by DOD exercising this option includes, shipping cost savings, reduction of loss and damage claims costs, good will through customer satisfaction, and leverage on the carrier/agent when quality is not maintained.

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The opinions and conclusions expressed herein are those of the student author and not necessarily represent the views of the U.S. Army Command and General Staff College or any other governmental agency. (References to this study should include the foregoing statement.)

ABSTRACT

THE HOUSEHOLD GOODS SHIPMENT AND STORAGE PROGRAM: THE PROBLEM OF LOSS AND DAMAGE OCCURRING IN CODE 4 SHIPMENTS by MAJ William H. Land III, USA, 80 pages.

This thesis investigates the current code 4 shipping method used when moving Household Goods from the continental United States to Overseas locations. The investigation includes a comparison with the commercial industry method. A review of the DOD test conducted, using the commercial shipping method, was analyzed. Security measures used in code 4 shipments were also compared with the commercial industry standards.

Research questions examined in this thesis are: (1) Can the loose stow seavan method reduce loss and damage claims? (2) Is there a better way to secure code 4 household goods shipments when moved overseas? and (3) Are there value added benefits to DOD for implementing new methods in overseas shipping?

This thesis supports the premise that Military Traffic Management Command (MTMC) can reduce loss and damage claims occurring in overseas shipments by including the loose stow seavan method as an option to the personal property shipping office (PPSO). Value added benefits realized by DOD exercising this option includes, shipping cost savings, reduction of loss and damage claims cost, good will through customer satisfaction, and leverage on the carrier/agent when quality is not maintained.

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LIST OF ILLUSTRATIONS

LIST OF ABBREVIATIONS

CARL	Combined Arms Research Library
CGSC	Command General Staff College
DOD	Department of Defense
DPM	Direct Procurement Method
HHG	Household Goods
HHGFAA	Household Goods Forwards Association of America
HRIPP	High Risk Inventory Protection Program
ITGBL	International Through Government Bill of Lading
MSC	Military Sealift Command
MTMA	Military Traffic Management Agency
MTMC	Military Traffic Management Command
POD	Port of Debarkation
POE	Port of Embarkation
PPSO	Personal Property Shipping Office
PD	Pick Up Date
RDD	Required Delivery Date
SIT	Storage In Transit
TDR	Traffic Distribution Record
TOS	Tender of Service
USAFE	United States Air Force Europe
USAREUR	United States Army Europe
USTRANSCOM	United States Transportation Command

CHAPTER 1

INTRODUCTION

Background

The Military Traffic Management Command (MTMC) is a jointly staffed, industrially funded major Army command. It is an integral part of the United States Transportation Command (USTRANSCOM), and one of ten unified and specified commands reporting to the Secretary of Defense and the Joint Chiefs of Staff. As the single transportation manager for the Department of Defense (DOD) worldwide Personal Property Shipment and Storage Program, it is charged with a tremendous responsibility.

Personal property is the single most expensive commodity transported by the DOD. A goal of MTMC is to provide an effective worldwide personal property traffic management program. In order to accomplish this enormous task, the DOD relies heavily on the commercial transportation industry. The commercial industry must meet certain guidelines which are laid out for the carriers and enforced by MTMC. These guidelines are formulated in coordination with the carriers and the Household Goods Forwarders Association of America, Inc. (HHGFAA), an organization comprised of over 1,300 members throughout the world. The HHGFAA is the carrier's voice to the DOD and MTMC on the Personal Property Shipment and Storage Program.

Carriers who have received approval from MTMC to participate in the movement of Household Goods (HHG) have three scoring criteria to

follow. These criteria established by MTMC are used to score each shipment awarded to the carrier. Carriers' shipments are scored on their ability to meet the assigned Pickup Date (PD), meet the Required Delivery Date (RDD), and the dollar amount of loss and damage on each awarded shipment.

Development

MTMC origin can be traced back to the Army's former Office of the Chief of Transportation, established 31 July 1942. However, it was not until fourteen years later that a separate agency was established to manage and carry out traffic management functions. In 1956 the Secretary of Defense designated the Secretary of the Army as the single manager for traffic management within the United States. The Military Traffic Management Agency (MTMA) was established shortly thereafter to carry out this function. Over the next fourteen years MTMA would undergo several more redesignations before becoming MTMC. It was not until 31 July 1974, that it was redesignated as MTMC.

Since its redesignation, MTMC responsibilities have increased significantly. On 1 October 1988, MTMC became a component of USTRANSCOM, which is headquartered at Scott Air Force Base, Illinois. With the location of MTMC headquarters in the Nassif Building, Bailey Crossroads, Virginia, just outside Washington, D. C., it is conveniently near the Pentagon, the Department of Transportation, the Interstate Commerce Commission, and other regulatory agencies and bodies with whom the command routinely does business.

Composition

MTMC has nearly 400 active duty military personnel and nearly 3,000 civilian employees stationed around the world. One of its major responsibilities is worldwide traffic management. MTMC supports more than 300 DOD personal property shipping offices throughout the world and conducts business with some 800 household goods carriers and more than 1,400 commercial warehouses. To accomplish this tremendous mission it relies on two of its three subordinate commands. See Figure 1.

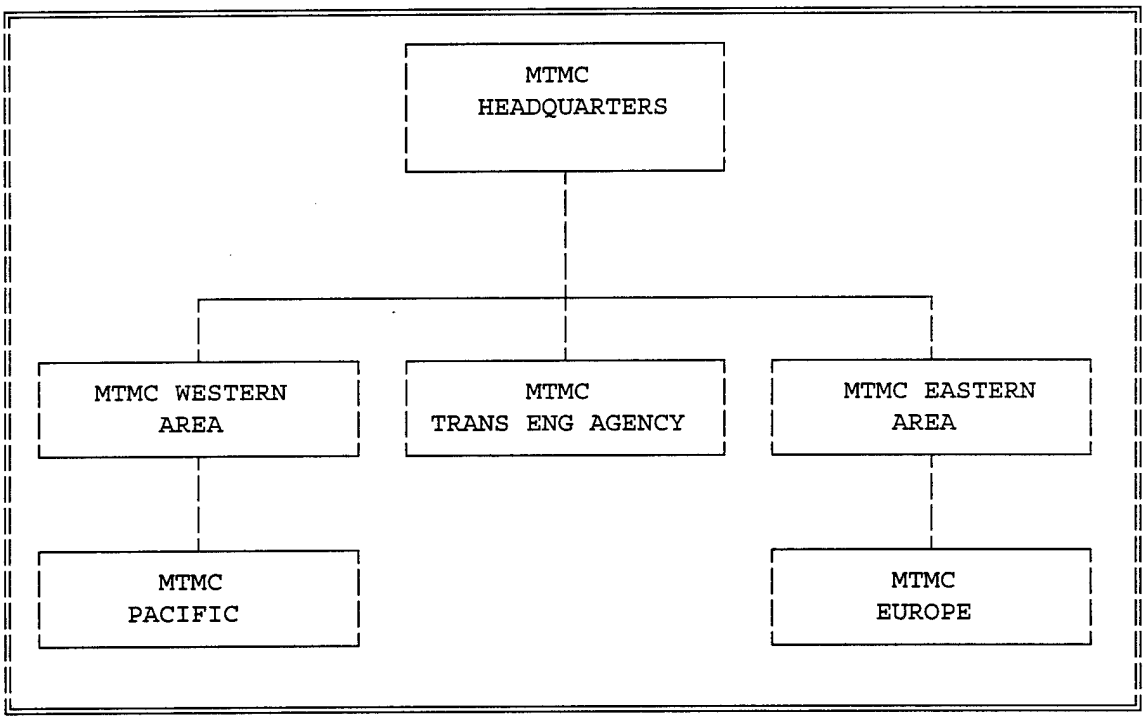

Figure 1. MTMC Organizational Chart
Source: Ensuring Combat Power Gets to its Place of Business, MTMC, Public Affairs Office, Fall Church, VA. 1993.

MTMC Western Area, one of MTMC's subordinate commands located in Oakland, California, is responsible for traffic management in 22 western states, plus Alaska and Hawaii. MTMC Pacific, a subordinate

command of MTMC Western Area, is headquartered at Wheeler Army Airfield, Hawaii. It is responsible for Far East countries like Japan, Guam, and South Korea. The second subordinate command is MTMC Eastern Area located in Bayonne, New Jersey. This command is responsible for traffic management in 28 states, plus Panama and Puerto Rico. Its subordinate command MTMC-Europe is located in Rotterdam, Netherlands, and is responsible for Europe, Africa, South America, and the Mediterranean region. These two commands and their subordinate commands work together to enforce and monitor the DOD worldwide personal property shipment and storage program. MTMC Transportation Engineering Agency is located in Newport News, Virginia, and is the key transportation engineering/deployability analysis center within DOD. The Transportation Engineering Agency is not involved with the MTMC shipment and storage program.

Purpose

My thesis is directed at determining if loss and damage of household goods shipments can be reduced. Specifically, the research will focus on the movement of code 4 shipments to and from overseas locations.

> A code 4 shipment is the movement of HHGs in a MTMC-approved door-to-door shipping container (wooden boxes); whereby a carrier provides line-haul services from the origin residence to the ocean terminal, ocean transportation to port of discharge, and line-haul service to destination residence, all without rehandling of container contents.[1]

During the recent troop reductions in Europe, millions of dollars were paid by the DOD in claims for lost and damaged items. The significance of this study is the impact it will have on reduced cost on

claims if a solution or area is identified that would reduce or eliminate the loss/damage that is occurring in our service members' shipments.

According to MTMC, during the 1993 fiscal year, over $1.2 billion was spent on more than 754,000 personal property shipments within the Army, Air Force, Navy, and Marines. Of that total, 73,866 Army HHG shipments had claims totalling $51.9 million in loss and damage; Air Force, 49,254 shipment claims, totalling $35.5 million; Navy, 19,429 shipment claims, totalling $12.5 million; and Marines, 3,238 shipment claims, totalling $2.3 million. That equates to $102.3 million in claims paid out in 1993, for an average of $703.00 per personal property claim in FY93. These numbers do not include items that some service members may have considered as not being worth the trouble to obtain a reimbursement from legal services. The ratio of claims filed to the number of shipments moved equates to just under 20 percent. This equates to one out of every five DOD shipments having loss or damage claims filed, compared to the commercial industry claims rate of one out of every ten shipments moved, or 10 percent.

According to the commercial insurance industry "80 percent of all loss and damage is preventable."[2] If the DOD could reduce its loss and damage rate by 80 percent, the potential in savings is in excess of $81 million a year.

Objectives

In this thesis four areas will be examined. The first area is the current methods used to ship HHGs from the United States to overseas locations. The second area will examine another way to move HHG

shipments that will reduce the current loss/damage claim rates that the DOD is currently paying. The third area examines how the commercial industry moves and secures commercial HHG shipments. The final area looks at current security measures taken by the DOD in comparison to the commercial HHGs Industry when moving shipments to overseas locations.

Chapter 4 describes, in detail, the current DOD code 4 shipping method and how it works.

Assumptions

The United States Air Force, Navy, and Marines have the same problems as the Army with loss/damage to HHG shipments awarded to commercial carriers. In comparison the commercial industry does not have the amount of loss and damage to HHG shipments as the military. Commercial industry loss and damage rates vary from firm to firm but average 10 percent across the board compared to the DOD average of 20 percent. The amount of loss/damage to code 4 shipments is greater than any other code of service, due to shipment and handling methods.

Key Terms

Carrier. "A business or forwarder of personal property holding an appropriate certificate(s) or permit(s) issued by federal or State regulatory agency and approved by DOD."[3]

Carrier Agent. A business firm, corporation, or individual, acting for or in behalf of a carrier. A bona fide agent of a personal property carrier, as distinguished from a broker, is a person or "business enterprise representing and acting for a motor carrier or

freight forwarder and performing duties under the direction of the carrier."[4]

Direct Procurement Method (DPM). Unlike ITGBL shipments, those moved by DPM require DOD involvement. Here the property is not transported under one bill of lading. The DOD assumes responsibility for contracting each segment of the transportation process. As many as five contracts may be required to transport the property; origin services (packing and crateing), line-haul to the origin port, ocean carriage, line-haul from the destination port to the delivery area, and destination services (delivery, removal of the property from the wooden container and unpacking). Typically, a single commercial company will be contracted to provide the origin services, transportation to the origin port. Ocean transportation is provided by Military Sealift Command (MSC) contract vessels.

Disqualification. If the problem warrants more drastic measures a disqualification may be imposed. This action must be taken by the Commander, MTMC, and will result in the exclusion of a carrier from participation in the DOD Personal Property Shipment and Storage Program at one or more installations for a definite or indefinite period of time. This action is imposed in accordance with the DOD 4500.34R, Personal Property Traffic Management Regulation.

Door-to-Door. Door-to-Door containerized shipments are used by the commercial industry to ship HHGs to overseas locations. The greatest benefits of containerized Door-to-Door moves are realized when the shipper uses the container to carry goods directly from a residence to a new location across the ocean. In most cases, the only time the

container will be opened while enroute is for Customs inspection, if that container is selected. This mode reduces susceptibility to pilferage and theft, eliminates multiple handling of shipping containers and has the least possible exposure to the elements. If the cargo is properly stowed and secured, this method of shipment can be highly productive.

High Risk Inventory Protection Program (HRIPP). The HRIPP was developed by the HHGFAA to combat the serious problem of loss and damage suffered in HHG shipments departing Europe during the height of the drawdown. The HRIPP "requires the service member to assemble all valuable items into a single area, preferably a separate room, before the day of packing."[5] The purpose is to provide additional security measures and to be responsive to the pilferage problem of readily saleable, high risk items from personal property shipments. Televisions, stereos, compact discs, video cassette recorders, figurines, and weapons may be considered high risk. These procedures are "designed to prevent, detect and minimize theft of high risk items by assigning individual responsibility and providing an audit trail for certain packing, inventorying and unpacking operations."[6] This program is optional for service members. MTMC has not incorporated this program into the shipment and storage program as of this study.

Household Goods Forwarders Association of America Inc. (HHGFAA). This organization was "founded in 1962 and now has over 1300 members."[7] The HHGFAA has an annual budget of over 400,000 dollars and represents the carriers engaged in the movement of HHGs by door-to-door

container method. The HHGFAA is the commercial carrier's voice for the DOD personal property shipment and storage program.

International Through Government Bill of Lading (ITGBL). ITGBL code 4, is currently the most frequently used method of transporting personal property HHG shipments to overseas locations. The property is consigned to a commercial carrier that assumes "through" responsibility for the property, e.g., packing, crating, drayage, transportation by air or surface, storage in transit, delivery, and unpacking. Once the shipment is tendered to the carrier, government involvement is limited to ensuring the carrier complies with the terms and conditions of the tariff. The DOD does not assume an active role in the movement of the property unless the carrier fails to perform in a satisfactory manner.

ITGBL Container Requirements. All HHG shipping containers will be in good condition and shall be made of wood, fiberglass, metal, or a combination of these items. Each container used will be caulked, sealed, and weatherproofed. These standards of performance are established in Military Standards (MIL-STD) 1487, "Performance Testing of Commercially Owned Containers," and shall be used when containers are not already approved by MTMC. MIL-STD 1487 is also used for design altered containers and for designed containers not yet approved.

Loose Stowed-Seavan/Tender (LS-T). This is a proposed method. Property is not crated in type II containers when using this method. The members property is packed into fiberboard boxes or wrapped in tissue or paper blankets as required. A seavan is ordered and placed at the member's residence. The property is stowed directly into the seavan

and blocking and bracing is applied as necessary. The seavan is then line-hauled to the origin port, ocean carriage and line-hauled from the destination port to the delivery agent. OCONUS, destination services are obtained under a negotiated tender of service. CONUS, origin or destination services, as applicable, are obtained under the Direct Procurement Method contract.

Loss and Damage. In the Tender of Service (TOS), which carriers established with the DOD, the carrier has agreed to exercise care to prevent loss and damage of personal property in the process of packing and will properly and amply protect personal property in his possession. The carrier will not be liable for loss/damage that occurs to property while the shipment is in the effective custody and control of the Government. "Effective custody is defined herein to mean when a shipment is delivered to authorized representatives of the United States Government."[8]

It is important to note that loss/damage is not broken out by the service transportation offices, nor by the claims headquarters for each service, therefore this study will combine loss and damage together.

Military Sealift Command (MSC). The single DOD operating agency responsible for providing DOD sealift services for the movement of household goods to and from overseas locations.

Personal Property Shipping Office (PPSO). The PPSO is "an activity designated to provide traffic management, counseling, and application processing within a designated area of responsibility."[9]

Port of Embarkation/Debarkation (POE/POD). When using these terms for ocean ports, it will include areas, such as docks, wharfs, piers, and berths, at which HHG containers are loaded and discharged from a ship. This includes the carrier's port terminal facility or warehouse that services the ocean port.

Required Delivery Date (RDD). A specified calendar date on or before which the carrier agrees to offer the entire household goods shipment of personal property for delivery to the member or member's agent at destination. If the RDD falls on a Saturday, Sunday, Foreign National, U.S. National, or state holiday, the RDD will be the following working day.

Sealing of Containers. Containerized HHG and unaccompanied baggage shipment external containers are required to be sealed at the origin pickup point with accountable seals. "Four seals are required for each HHG container. These seals will secure the access overlap door and side panels."[10] Seal numbers must then be placed on the service member's inventory, either beside the container number or annotated by the individual container number in the remarks section of the service member's inventory sheet.

Suspensions. When a carrier has violated the TOS or broken other contractual agreements the Transportation Office may choose to impose a suspension. This suspension action taken by the PPSO against the carrier or his agent, will temporarily halt distribution of personal property shipments serving a specific installation. The suspension will remain in effect until such time the transportation office is satisfied

the carrier has taken the necessary actions to preclude a recurrence of the problem which initiated the suspension.

Tender of Service (TOS). The TOS is a tool used by Transportation Offices to evaluate the carrier's performance when moving HHG shipments. It outlines the terms and conditions that DOD-approved carriers have agreed upon, in order to provide transportation services. It covers areas such as qualifications, mutual agreements and understandings, service requirements, performance requirements and certification.

Traffic Distribution Record (TDR). The TDR, which is maintained by the PPSO, is the accountability system used to ensure that the proper carriers are getting their appropriate tonnage required in accordance with the rates that the carriers have filed. Carriers submit rates every six months for rate channels and codes of service for which they want international traffic. Depending on the rates submitted the carrier will receive a portion of the traffic for a given channel. Generally the lower the rate, the more traffic the carrier will receive for that given channel. The TDR is used to control this process and to ensure that the shipments are distributed exclusively to carriers on the lowest rate level unless the volume of traffic exceeds the capability of the low rate carrier. Shipments shall always, however, be offered first to the "carriers on the lowest rate level before higher rate level carriers are considered unless the primary carrier is suspended, cancels its rates, is placed in nonuse, or refuses the traffic."[11] The TDR is the PPSOs' primary tool for ensuring that HHG tonnage is distributed properly.

Transit Time. Transit times are established by MTMC in agreement with the carriers on the number of days needed to transport HHG shipments between two points. These times will vary depending on the distances involved.

Volume Movement. Movement of HHGs, totaling 200,000 pounds or more, or unaccompanied baggage, totaling 50,000 pounds or more, for military and civilian personnel from one origin or commuting area to one destination or commuting area within a 90-day period, will qualify for a volume move. Volume moves may be for lesser amounts if special requirements exist.

Worldwide Nonuse Actions. When the problem calls for severe measures, MTMC will place the carrier in worldwide nonuse. The PPSO and area commands will inspect local and port agent facilities located in their responsible areas, for shipments of the subject carrier still on hand. Located shipments will be terminated and alternate transportation to the final destination arranged.

Limitations

The research is limited to ITGBL code 4 shipments because of the amount of loss/damage associated with this shipment method and the time constraints imposed on this study. These factors further limit the research to (analyzing only) United States Army code 4 shipments, the primary user of code 4 to overseas locations. As stated earlier loss and damage will be combined in this study due to the Army military claims system structure. Limited research material available in the area of military shipments forced the author to look at the commercial industry and how they ship HHGs to overseas locations. Custom

procedures used in clearing HHG shipments will not be studied due to the few number of shipments that are involved in customs inspections.

Delimitations

The efforts of this thesis will be limited to reviewing the current code 4 shipment data from 1991 through 1993. This will include available claims information for this same time period. During this period, the highest use of code 4 shipments occurred, with thousands of service members departing Europe. Information from 1994 will not be used due to the lack of availability and time constraints of this study.

Specific Research Question

A need exists to answer the question: How can loss/damage of code 4 HHG shipments be reduced? With the recent pilferage problems that occurred in code 4 shipments during FY92 and FY93 drawdown of forces in Europe, carrier participation may be effected. Eligibility of quality carriers in the DOD Personal Property Shipment and Storage Program, may hinge on loss and damage and other problems that exist with the movement of HHG shipments to and from overseas locations. The research strategy is to examine and outline the current code 4 shipment method, consider where problems have developed, and determine what the DOD and MTMC can, or cannot, do to resolve problems regarding loss and damage.

Scope

Each year, loss and damage of HHG shipments costs the DOD millions of dollars. Yet, if the insurance industry is correct, "up to

80 percent of those losses are 'preventable' that is, they most likely could have been avoided by prudent shipping practices."[12] This research focuses on finding ways to reduce or eliminate the problems of loss and damage to code 4 HHG shipments. By researching how the commercial industry moves HHG shipments with less loss/damage, an answer on how to reduce DOD loss and damage to shipments may be found. The quality of service provided by carriers involved in the Personal Property Shipment and Storage Program could depend on how the government responds to the loss and damage that occurs in our service member's shipment. If quality drops any lower the Army could suffer the effects with lower retention of quality soldiers. Mr. Robert H. Moore, MTMC Deputy Chief of Staff for Operations, said, "The cost associated with bad moves go well beyond replacing a lost family heirloom. . . . The biggest concern that we have is retention. . . . Bad moves tend to sour a member on military service."[13]

Endnotes

[1]Military Traffic Management Command, Personal Property Traffic Management Regulation, DOD 4500.34R, October 1991, Change 1-6.

[2]CIGNA Companies, A Guide to Cargo Loss and Damage, Publisher, Ports of the World, Philadelphia, PA. 1994, 55.

[3]Military Traffic Management Command, International Personal Property Rate Solicitation 1-5, Falls Church, VA, 1994, 2-1.

[4]Ibid., 2-1.

[5]Ibid., 2-1.

[6]Donald H. Mensch, President HHGFAA, phone interview by author, Alexandria, VA., 15 September 1994.

[7]Betty Wells, Industry Tackles Theft, Carrier Compliance Branch, Headquarters MTMC, Public Affairs Office, Published 1993, 14.

[8]Donald H. Mensch, President HHGFAA, High Risk Item Protection Program Guidelines, 4 March 1994.

[9]Military Traffic Management Command, International Personal Property Rate Solicitation 1-5, Falls Church, VA, 1994, 2-4.

[10]Military Traffic Management Command, Personal Property Traffic Management Regulation, DOD 4500.34R, October, 1991, Change 1-6.

[11]Ibid., 2-30.

[12]James Aaron Cooke, "How to Protect your International Freight," Traffic Management Magazine, September 1993.

[13]Robert H. Moore, Movin' on up..., Deputy Chief of Staff for Operations, MTMC, Army Times, Published, October 1994, 35.

CHAPTER 2

REVIEW OF LITERATURE

A detailed review of literature for this thesis achieves two purposes. First, it allows the reader to become familiar with the current method used in moving code 4 HHG shipments. Second, it provides any follow-on researcher a short synopsis of the variety of information relating to this topic. The review of literature for this thesis consists of books, reports, government publications, journals, articles, and interviews. The information from these sources was examined, compared, and contrasted to determine relevancy to the topic.

Research material was gathered from a variety of locations. The Combined Arms Research Library (CARL) at the United States Army Command and General Staff College (CGSC) and MTMC, located at Falls Church, Virginia, were the primary sources for documentation. The Fort Leavenworth Staff Judge Advocate Office and the commercial HHG shipping industry provided valuable assistance in the research. Excellent research material was obtained from CIGNA, a commercial insurance company located in Park Ridge, Illinois. CIGNA insures DOD carriers as well as other large industrial firms. The HHGFAA in Alexandria, Virginia, proved to be instrumental in the research into the loss and damage of HHG shipments and what industry is trying to do to combat this problem.

The following are brief reviews of a few of the significant reference materials.

Government Publications

Personal Property Traffic Management Regulation, a DOD publication, is an excellent reference which is published and managed by MTMC. This regulation outlines the DOD Personal Property Shipment and Storage Program, and its purpose is to prescribe uniform procedures for the movement and storage of HHG, unaccompanied baggage, mobile homes, privately owned vehicles, and firearms. It is continually reviewed and updated as required by MTMC in coordination with the commercial industry, service components and MTMC subordinate commands. This regulation explains how HHG shipments should be handled and the requirements for moving DOD shipments. Chapters 1, 2, 10, and 11 were extremely helpful in the research efforts.

The International Personal Property Rate Solicitation is a government publication produced by MTMC. This publication was helpful in providing the rules and regulations required to participate in the ITGBL program. When a carrier submits and receives a certification of rates, he has agreed to abide by the contents of this solicitation. This book is one of the key publications used in the preparation of this thesis.

Department of the Army Pamphlet It's Your Move is an Army publication produced for the service member to use in preparing for an upcoming HHG shipment. It gives the member guidelines to follow to make their move go smoothly. In short, it outlines what can be done to circumvent problems before they occur. Highly informative, this

pamphlet is used by the Army Personal Property Shipping Offices when counseling service members prior to shipping HHGs.

Translog, prepared by MTMC's, Public Affairs Office, and published quarterly is a functional bulletin that contained significant information in regards to my research. This bulletin was one of the main references used to find out about the current changes and concerns that MTMC is facing within the HHG shipment and storage program. Each article published in this bulletin ends with a MTMC point of contact and phone number. These contacts were key in the preparation of this thesis.

Ensuring Combat Power Gets To Its Place Of Business, is a MTMC publication produced by the Public Affairs Office each year. This publication gives a snapshot of how the command originated and how it is currently configured. It outlines each subordinate command under the Commander MTMC and their responsibilities. It breaks out each division in the MTMC Headquarters and gives a summary of the responsibilities within each division. This publication provides future researchers in this area, with a better understanding of how vast MTMC's responsibilities are.

Reports

In Lieutenant David R. Putnams' US Navy graduate paper, Improving The Military Household Goods Program, he reviewed several different areas that MTMC has studied to try and control the loss/damage that occurs in HHG shipments. Three areas of the military HHG program were examined in his paper. These areas were the household goods inventory accountability process, carrier's contributions to the moving

industry, and the price and quality differences between blanket wrapped household goods shipments moved via moving van (code 1) and paper wrapped household goods shipments loaded and moved in crates (code 2). Although his graduate paper concentrates on code 2, a different code of service, his section on containerization supported my research.

In the report, Adoption of a Single Method of Shipping Household Goods Overseas--Pros and Cons, produced by the United States General Accounting Office in Washington, DC, the adoption of a single shipment method was researched. The General Accounting Office (GAO) report, requested by the House Committee on Appropriations describes the pros and cons of a single shipment method. The study looked at the ITGBL (code 4) and the DPM methods and determined that at that time (1976) it was not desirable to adopt either method as a single mode of shipment to and from overseas locations. Even though this report is 16 years old it shows that the DOD is interested in trying to find a single method of shipment for overseas bound shipments.

Articles

Mr. Don Mensch, the President of the HHGFAA, told in the February 16, 1993, Military Forwarder Newsletter about a newly developed concept to reduce the occurrence of missing items of readily saleable (high risk) items of personal property. His article explained how the HRIPP works and when implemented properly reduces pilferage from HHG shipments. He explained how the Industry felt that the HRIPP was a viable and less costly solution than banding shipping containers and asked MTMC to adopt the HRIPP in Germany as a substitution to banding.

This article was useful in explaining what measures the commercial industry is trying to take to reduce pilferage in HHG shipments.

Shape up shipping out, 7 November 1994, and Movin' on up . . ., 14 November 1994, from the Army Times were useful to this author. Both articles spoke of the tremendous problem that is occurring with loss/damage of HHG shipments within the services. These articles further supported my earlier statistics that one out of five service members complain or file claims after the shipment is completed. One article stated that the problem of loss and damage is so severe that something must be done soon before the problem effects retention of our service members. These articles support the research question on the need to reduce loss/damage in HHG shipments.

Interviews

My phone interview with, Mr. Collin Hutchison,[1] Assistant Deputy Chief of Staff for Operations, (ADCSOPS), Quality Control Division, MTMC Headquarters on October 22, 1994 verified the current problems MTMC is facing with HHG loss and damage. Mr. Hutchison verified that MTMC is concerned about loss and damage and is drawing a team of experts together to review the code 4 shipment method as well as other relevant areas. Chapter 4 will cover the code 4 process in greater detail.

The author also interviewed Mr. Herb Fechter from the Inland Theater Transportation Directorate, Personal Property Division, Stuttgart, Germany on several occasions from August 1992 until June 1994. Mr. Fechter was instrumental in researching new ways to

ship HHG shipments from Germany to the United States. He devoted all his efforts to the research of the ITGBL shipping method and is now working with a team of experts gathered by MTMC to try to solve international code 4 move issues. Mr. Fechter was instrumental in my gaining insight into the loose stow shipment method discussed in detail in chapter 5. Any research into the code 4 program would be incomplete without a call or visit to Mr. Fechter.

Endnotes

[1]Collin Hutchison, Assistant Deputy Chief of Staff for Operations-Quality, Military Traffic Management Command, Phone Interview, 22 October 1994.

CHAPTER 3

RESEARCH METHODOLOGY

The methodology used in accomplishing the research for this thesis is a review of historical information. The nucleus of the research on household goods shipments came from the references described in Chapter 2 and others listed in the bibliography. This core data served as the foundation for understanding problems the Personal Property Shipment and Storage Program encountered prior to, during, and after the drawdown of forces from Europe and how these problems may have originated.

Chapter 5, answers the results of the research that was in question format: Can a new shipment method reduce loss and damage occurring in overseas shipments? Can the security measures taken in moving code 4 shipments be improved to reduce loss/damage? Here, is found the answers to the questions as a comparison of commercial industry procedures to DOD procedures to determine what problems are common. The information compiled from this research effectively answered my research question.

Chapter 4 will give an understanding of the phrase "Loss and Damage." Chapter 4 also describes how the current code 4 shipment method should work according to regulation.

Chapter 5 compares the Loose Stow Seavan shipment, a new

shipment option, to the code 4 method. In this chapter, current and new shipping container security methods will be compared as well as procedures taken by the commercial industry when shipping HHGs overseas. Chapter 6 will provide recommendations and conclusions based on the comparisons done in Chapter 5.

CHAPTER 4

LOSS AND DAMAGE

According to the insurance industry "80 percent of all loss and damage is preventable."[1] One of the Nation's leading insurance corporations, CIGNA, said that loss and damage can be broken into two categories. These are fortuitous and preventable losses. Losses from an Act of God like a hurricane, fire, collision, and sinking vessel are classified as "fortuitous" or accidental. Fortuitous losses for the most part are unpreventable.

The second type of loss is defined as preventable. "Of those preventable losses, theft, water damage, and improper handling account for almost four out of five claims."[2] When applied to the DOD average claims rate of 20 percent that could mean a reduction of 80 percent of all claims filed fall in the preventable category. This equates to over $80 million in DOD claims filed, for all codes of service, that could be prevented. In most of those cases, proper preparation, packing, and marking of the goods would have greatly improved the chances of a successful move.

In FY93 alone, over 170 thousand shipments or 23 percent of all DOD HHGs moved were considered international shipments. Of those 170 thousand shipments, 34 thousand or 20 percent suffered loss or damage during shipment. This equates to over $23 million in loss and damage claims that were paid in a one year period. If 80 percent of all

commercial shipments loss and damage is preventable then it is reasonable to assume that 80 percent of all DOD loss and damage is preventable. If loss and damage of DOD international shipments were reduced by 80 percent it would result in an estimated savings of $18.4 million in claims cost alone. Ways and means to reduce preventable losses will be examined in chapter 5.

How Does the current code 4 method work?

The next several pages are intended to outline how the current code 4 shipping method works in order to give the reader a better understanding of where problems may lie. The following is a step by step process which begins with the service member's initial counseling at the PPSO and ends when the shipment is delivered to the member at destination.

Counseling Appointment

The shipment process begins when the service member receives orders authorizing a move at government expense. One of the first steps is to set up an appointment with the local Transportation Office. During this appointment the member "shall be counseled only by qualified personnel familiar with the administrative procedures of the program."[2] The counselor's main job is to ensure that the service member understands his or her entitlements and responsibilities as part of this program.

During this time the member should be informed of many points that will help in the shipment process. Here are just a few of the salient points that the counselor should cover:

1. The counselor should cover the amount of coverage that is placed on the shipment by the DOD and the availability of commercial insurance at the member's expense if so desired.

2. The counselor should explain the claims procedure to be taken by the member if loss, damage, or inconvenience occurs.

3. The counselor should explain the member's responsibility prior to the arrival of the packing crew.

4. The counselor should explain the actions the member should take upon arrival at destination.

The key point is that during the initial stages of the shipment process the member plays a big role in the preparation of the shipment. After counseling, the shipment is awarded to the next available carrier in accordance with the PPSOs TDR.

Premove Survey

After a shipment has been awarded to the next available carrier in accordance with the TDR, the carrier's agent is required to contact the member to determine the quantity of personal property to be moved. Any special requirements for packing should be identified. This survey is conducted by the agent for any international shipment that is estimated at 3,200 pounds or more and has at least five days remaining before pickup date. The PPSO may waive the premove survey if it is not requested by the property owner and/or the PPSO determines it to be unnecessary. For shipments weighing less than 3,200 pounds, the carrier/agent must contact the member by phone prior to shipment pickup.

Origin Pickup

After completion of the premove survey, the carrier/agent will arrive at the member's residence on the pickup date assigned by the PPSO. During this phase the carrier's agent is responsible for the inventorying, marking, packing, loading, and sealing of all personal property to be shipped. All HHG items will be inventoried and recorded on the HHG inventory work sheet. At origin, the household goods descriptive inventory is used to record the condition of the HHG items to be shipped. It is completed by the agent in agreement with the service member and shows the condition of the property. All items are then wrapped, padded, and placed into cartons of solid or corrugated fiberboard which may be used for packing. After packing, "cartons must be glued or sealed by taping lengthwise at the joint on top and bottom."[3] At the property owner's request, items such as stereos may be packed in the original container by the agent.

Items are identified by affixing a tag or tape to each article. This does not include separate items packed in fiberboard boxes and placed into containers. "Each shipment will be separately identified by lot and each article will be assigned a number that must correspond with the item number shown on the inventory form."[4]

Each numbered item is then placed into ITGBL HHG shipping containers as described in chapter 1. These containers are caulked, sealed, and transported to the agent's facility for external container markings. See Figure 2.

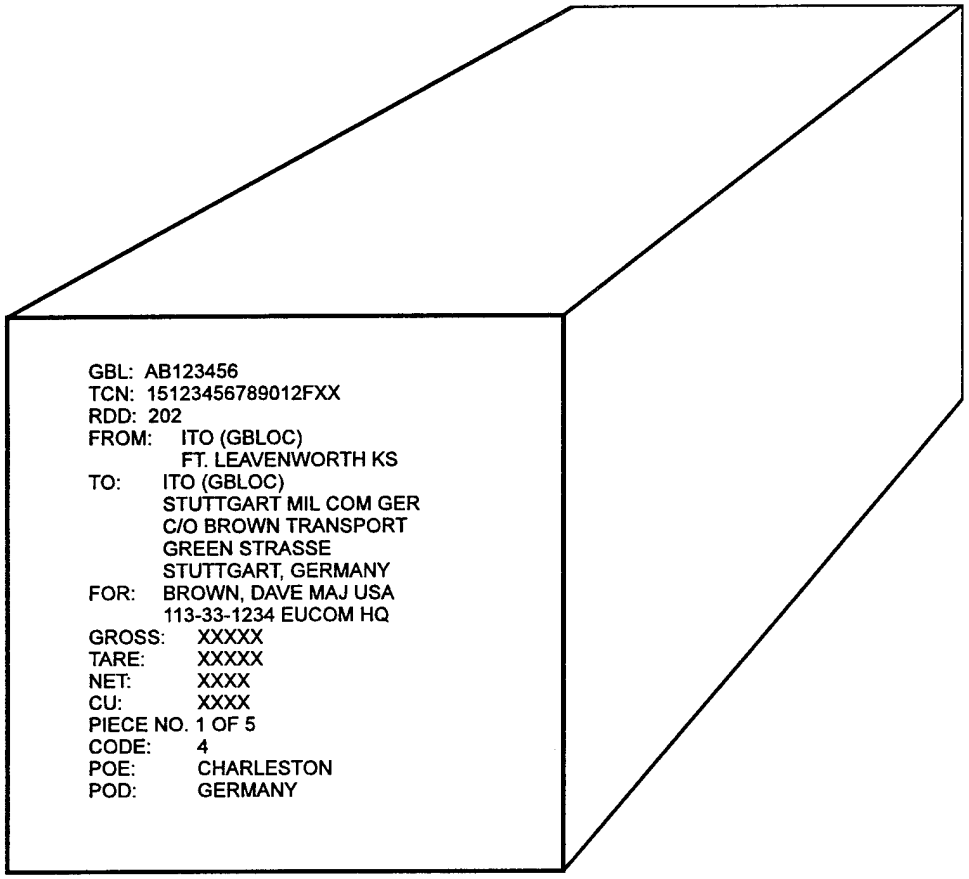

Figure 2. Proper Type II Container Markings
Source: MTMC, Personal Property Traffic Management Regulation, DOD 4500.34R, Oct, 1991, change 1-6.

Agent's Warehouse

Upon arrival at the agent's facility, the shipping containers are downloaded, weighed, and marked. The carrier/agent in most cases contracts with a freight forwarder for onward movement to the ocean Port of Embarkation (POE) where the containers are uploaded on flatbed line-haul trucks for movement. These HHG containers must remain covered throughout the movement process from origin to destination. Due to

carriers/agents trying to consolidate shipments, it may be several days before the shipment is moved from the warehouse to the ocean port.

Port Facilities

Once shipping containers arrive at the port of embarkation, they are again downloaded by port facilities and placed in large warehouses awaiting onward movement. Once the shipment is cleared and made ready for movement, it is stuffed (loaded), into 20 or 40 foot seavan containers. The average type II shipping containers is 8 feet high, 8 feet deep and 4 feet wide, with a total of 205 cubic feet of usable packing space. It takes 9 to 10 type II containers to fill a 40 foot seavan container. See Figure 3.

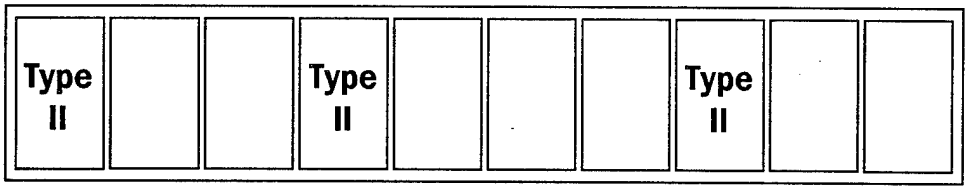

Figure 3. Loaded 40 Foot Seavan Container
Source: CIGNA, Cigna Ports of the World, A guide to Cargo Loss Control, CIGNA Companies, Philadelphia, PA, 1994 Fifteenth Edition.

In order to stuff (load) these containers, forklifts are used to lift and place the type II shipping containers into the seavan. Once a seavan is stuffed and cleared for ocean movement, it is moved to the seaport shipping container yard where it remains until the next available shipping vessel arrives in port. Once loaded aboard ship it is transported to the Port of Debarkation (POD).

When the seavan arrives at the POD, it is unstuffed (unloaded) in the same manner it was loaded. The shipping containers are then

stored in the port agent's facility, where they await clearance and transportation to the destination agent. When shipping containers depart the port agent's facility, they are uploaded on flatbed line-haul trucks, covered, and moved to the destination agent's warehouse.

Delivery Agent

Once the shipment has arrived at the carrier's local delivery agent's warehouse, the agent is required to report the shipment's arrival to the servicing PPSO. This date of arrival should be prior to the carrier's RDD. The PPSO will then locate the service member and request a desired delivery date. Once a delivery date is set, the HHGs will be delivered to the residence in the shipping container. At the service member's residence, the shipping container seals are checked, and the container is opened. All HHG items are then placed in the residence and inspected for any loss and damage that may have occurred during the shipment process. At this time the agent is required to furnish the member "a legible copy of the DD Form 619-1 if storage in transit (SIT), reweigh services or other accessorial services are performed enroute or at destination."[5] as well as "three (3) copies of the DD Form 1840 (Joint Statement of Loss or Damage at Delivery)."[6] Any loss and damage that is found is annotated as such on the DD Form 1840 and returned to the Staff Judge Advocates Office within 70 days for claims adjudication.

Summary

Described above is the routing of a typical code 4 HHG shipment. The process may vary slightly but generally this is the procedure for moving HHG items to and from overseas locations.

Endnotes

[1]CIGNA Companies, A Guide to Cargo Loss and Damage, Publisher, Ports of the World, Philadelphia, PA. 1994.

[2]Military Traffic Management Command, Personal Property Traffic Management Regulation, DOD 4500.34R, October 1991, Change 1-6.

[3]Ibid., A-18.

[4]Ibid., A-18.

[5]Ibid., A-25.

[6]Ibid., A-23.

[7]Ibid., A-23.

CHAPTER 5

LOOSE STOW ANALYSIS

Chapter 5 will look at several areas that could possibly be used to help reduce the loss and damage occurring to code 4 HHG shipments. Following is an analysis of the loose stow seavan shipment method tested by MTMC Field Office-Europe, a Directorate of MTMC Europe, Rotterdam, Netherlands. This analysis will outline and compare commercial industry procedures to DOD code 4 shipments, when shipping HHG shipments to overseas locations. It also looks at the current security methods taken for code 4 HHG shipments and compares them to other security methods available in the commercial industry.

What is a Seavan

Seavan containers come in various shapes and sizes. The most standard types are 20 and 40-foot containers. These containers are carrier-owned and limited to the carriers' specific trade lanes. The containers are generally married with a chassis, sometimes called a "bogie," at origin or destination and can be hauled over the road or by rail.

A 20-foot container has 1,100 cubic feet of interior space and will hold up to 44,800 pounds. The 40-foot container, while double in size (2,200 cubic feet), can accommodate up to 55,600 pounds. Of course, HHGs will not come near the maximum weight capacity of the

container. Normally, the maximum weight in a 20-foot container will be 7,700 pounds and 15,500 pounds in a 40-foot container.[1] Almost all steamship lines maintain a container pool in major metropolitan areas, so availability of equipment usually is not a problem.

Loose Stow Seavan/Tender (LS-T)

How do seavan shipments work? Would every member meet the criteria for loose stow seavan shipments? The next few pages are dedicated to explaining exactly how this method moves personal property in seavan containers.

How Does The Government Loose Stow Method Work?

In this method, unlike the current code 4 method, the property is not crated. HHGs are packed into fiberboard boxes or wrapped in tissue or paper blankets as required by the tender of service. A seavan is ordered under the Military Sealift Command (MSC), container agreement and placed at the member's quarters. The property is stowed directly into the seavan and blocking and bracing is applied as necessary. Line-haul to the origin port, ocean carriage and line-haul from the destination port to the delivery area are procured under the agreement. European origin or destination services, as applicable, are obtained under a negotiated tender of service. CONUS origin or destination services, as applicable, are procured under the Direct Procurement Method contract.

Counseling

No matter what method is chosen, the first step required when moving a shipment is counseling. Up front, the PPSO should determine if this type of shipment will meet the needs of the member and the service before it is arranged. Following are the guidelines that counselors should use before the loose stow shipment method is chosen:

a. Single shipment with an estimated weight that will be cost effective. Studies show that shipments weighing around 7000 pounds for 20-foot and 11,500 for 40-foot containers meet this criteria.

b. Shipments for members who can accept direct delivery at destination, or delivery shortly thereafter.

c. Multiple shipments from the same origin to the same destination. Volume moves meet this criteria.

The counselor will advise the member that under this mode of shipment, household goods are stuffed (loaded) directly into a 20 or 40-foot seavan container versus the standard wooden type II containers directly at residence. The member should be informed there is no change in the manner of packing and wrapping items from the commonly used code 4 method. The difference will be the number of times a shipment is handled while in-transit.

Packing

The seavan container is brought to the residence for direct containerization of the HHGs. Personal property will not be moved to an agent's warehouse facility in a loose condition. Once all HHG items are jointly inventoried, packed and marked, in accordance with the TOS, they are placed in the seavan. Once completed, a retaining wall made of

one-half inch plywood is constructed inside the container to prevent the shipment from shifting while intransit. This wall also separates different HHG shipments that may be placed into the same container. If it is a single shipment, the service member may affix their personal lock on the container for security purposes, along with carrier provided seals. Carrier seals are used for the purpose of identifying and tracking the container while in-transit. After loading, all customs documents must be completed at residence and given to the agent.

Shipment Weighing

After the shipment is loaded the seavan is weighed so the gross weight of the shipment transported in the seavan can be subtracted from the tare weight of the empty container. This will allow the net weight of the packed items to be identified.

Ocean Movement

Once the chargeable weight is identified the shipment is ready for movement to the POE. When the shipment arrives at the POE it is loaded on the next available vessel, moved to the POD, removed from the vessel and moved to the port agent's warehouse. The container is then line-hauled to the destination agent's facility for delivery to the member.

Delivery

Once the security lock and bracing are removed, a joint inventory is conducted to identify any loss and damage that occurred while in-transit. Loss and damage is identified on the DD Form 1840, Report of Loss and Damage worksheet, and returned to the member's local

Staff Judge Advocates Office within 70 days of delivery. The carrier/agent is responsible for the unloading and one-time placement of HHG items in a member's residence. At this point, the shipment is handled the same as a code 4 shipment, with boxes being unpacked and items reassembled. Figure 4 shows the configuration of a loaded Loose Stow Seavan.

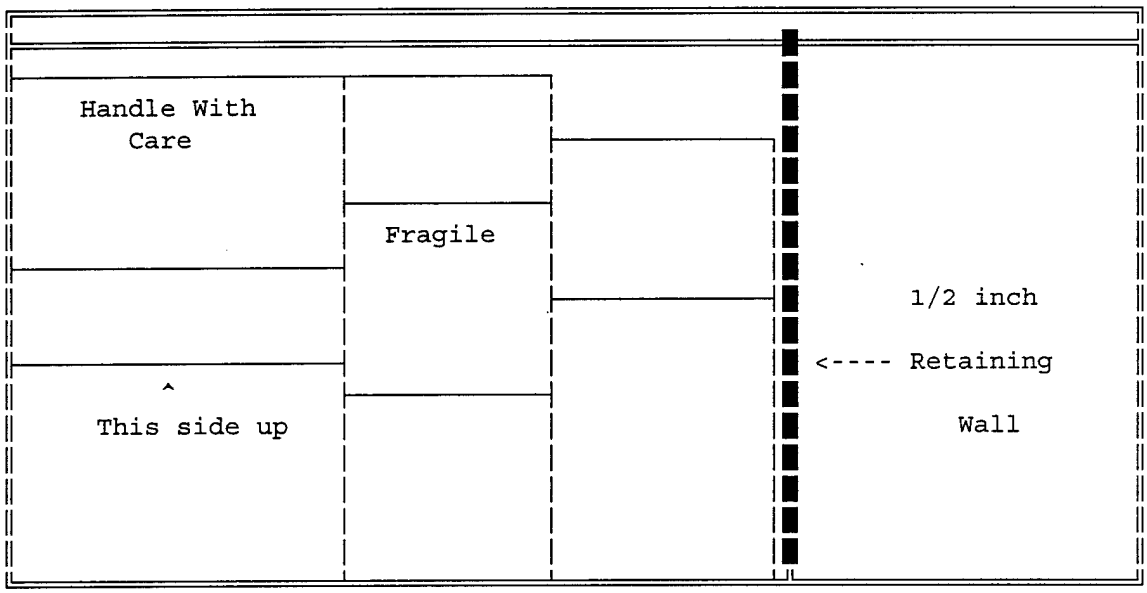

Figure 4. Configuration of a Loose Stow Seavan.
Source: CIGNA Ports of the World, A Guide to Cargo Loss Control, CIGNA Companies, Philadelphia, PA. 1994.

Loose Stow Seavan Test Report

The following information is from the actual loose stow seavan shipments which were tested from Cameron Station, Alexandria, Virginia, to Stuttgart, Germany. This report is used to provide factual information on the loose stow seavan shipping method. It shows the pros and cons with this method of shipping HHGs, and allows a comparison of the code 4 method, to the loose stow seavan method.

Comparison

In June of 79 the loose stow seavan method was tested on two HHG shipments from Virginia, to Stuttgart, Germany. The pickup of the first shipment was on June 4th and belonged to Lieutenant Colonel, (LTC) Patty, United States Army. It consisted of 5,400 pounds of HHGs. The second shipment was picked up on June 5th and belonged to Colonel (COL) Dickerson, United States Air Force, and consisted of 8,100 pounds of HHGs. Both HHG shipments were packed into the same 35-foot seavan container with a wall built between the shipments.

After loading, the seavan was moved to the port at Baltimore, MD., and loaded aboard the vessel "Sealand Resource" which departed for the port of Bremerhaven, Germany on the 11th of June. On the 23rd of June the containerized shipments arrived at the port of Bremerhaven. On June 25th the container was transported by Bundesbahn Tractor to the agent's warehouse in Stuttgart to await determination on the method of delivery. Both Lieutenant Colonel Patty and Colonel Dickerson were being assigned to the Stuttgart area. On the 3rd of July Colonel Dickerson's HHGs were delivered and on 4 July Lieutenant Colonel Patty's were unloaded at his new residence. The sealand container was returned to the Sealand system, 5 July 1979. Neither shipment received any damage warranting a claim and the comments from the member's, evaluating their move, were exceptional. Following is just some of what Colonel Dickerson's wife had to say about the loose stow container move that was made.

> Damage, with the Seavan method of transporting goods, that word can almost be deleted from the Moving Briefing. Lost Articles, with Seavan, that can also be deleted. Another big plus for Seavan, instead of having a hold baggage and household pickup, everything

> can go at once. We found it to be the best move we have ever had, we feel that it is efficient and less costly.[2]

Colonel Dickerson's complete letter is located at Appendix A, page 73.

The second shipment which belonged to Lieutenant Colonel Patty had excellent comments as well.

> This move has been the best I've experienced, due in large part to use of the Seavan for HHG shipment. A tremendous improvement over the ITGBL and Type II boxes. The container was in-country less than 30 days from the date we were packed. In summary, the use of this system is a step in the right direction, a plus in the "quality of life" program here in USAREUR and should be publicized as such. Thanks for the opportunity to participate and I highly recommend the program be standardized and fully implemented.[3]

Lieutenant Colonel Patty's complete letter is located at Appendix B, page 74.

Both letters were sent to Colonel Don Mensch the transportation officer at the Joint Personal Property Shipping Office at Cameron Station, Alexandria, Virginia, supporting the program. Copies were also furnished to HQ MTMC, Washington, D.C.; MTMC Europe; and Department of the Army, supporting the loose stow method

These two letters were part of the Loose Stow Seavan Report published by MTMC Field Office-Europe, in 1979. This same shipment method has been tested on and off over the last 15 years. The last test was January 1994 on a single shipment from Stuttgart, Germany, to Scott, Air Force Base, Illinois. The outstanding results remained unchanged.

Loose Stow Rate

The following is the actual cost breakdown of these two HHG shipments which had a combined weight of 13,500 lbs. These shipments moved from Cameron Station, Alexandria, Virginia to Stuttgart, Germany.

Procurement and Movement Cost

Cost for the seavan procurement and movement are as follows:

Joint Personal Property Shipping Office Washington (JPPSOWA) Area to Baltimore	$ 225.00
Baltimore to Bremerhaven ($31.50 per foot) X 35 =	1,102.50
Bremerhaven to Stuttgart ($14.28 per foot) X 35 =	499.80
Subtotal	$1,827.30

For the movement of the seavan from the agent's warehouse to the member's quarters, it was necessary to have the seavan reconsigned twice. These cost were as follows:

Agents warehouse to first members quarters ($150.00 + 79.73 for mileage)	$ 229.73
Agents warehouse to second members quarters ($150.00 + 102.58 for mileage)	252.58
Subtotal	$ 482.31
Bottom line, both shipments total Seavan Costs	$2,309.61

Packing and Unpacking Cost

Packing. The total cost for the packing of the seavan at origin was $2,187.00. This is based on the rate of $16.20 per net hundred weight by the carrier.

1st shipment	16.20 X 81 =	$1.312.20
2nd shipment	16.20 X 54 =	874.80
		$2,187.00

Unpacking. The total cost for unpacking was $644.77. Unlike the rates filed at origin based on net hundred weight, the rates under this tender were based on the itemized services performed on an hourly basis. These rates are shown on the following page.

Itemized Services

1st shipment	$376.30
2nd shipment	268.47
Total	$644.77

Total cost for the packing and unpacking of both shipments was $2,831.77.

Source: Special report, Loose Stow HHG Shipment No 1 VIA Seavan, Military Traffic Management Command Field Office-Europe, Stuttgart, Germany, 1979.

Cost Comparison of Code 4 to Loose Stow Seavan

Loose Stow Seavan Cost

The total cost for the 2 shipments by the loose stow seavan method was $5,141.48, providing a total savings of 31 percent when compared to Code 4 cost. This is a reduction of the cost per net hundred weight of $38.09. Both shipments were moved without a claim being filed which makes this method even more cost effective.

Code 4 Method

If both HHG shipments were shipped by code 4 using the low rate carrier, a rate of $55.50 per net hundred weight would have been used. The total cost of this combined 13,500 pounds shipment would have been $7,492.50. If today's low rate carrier was used, the difference would be an increase of $3.22 per net hundred weight. This equates to a total of $434.70, a 6 percent increase for a shipment moved in FY94.

Current Code 4 Shipment Rates

The following page is an actual breakout of some code 4 rates from an approved HHG carrier for the movement of HHG shipments in 1994.

The origin is from the state listed, to Germany. The actual location in Germany is not important since all of Germany consist of one rate area. See Figure 5.

STATE	BOX	STUFF	ORGIN	** L/H	PORT COST	DEST	*** FL/LH	PROFIT	TOTAL **** PER/HWT
KS	4.00	21.60	18.00	12.68	.50	17.42	7.10	5.76	*88.06
TX	4.00	25.15	16.20	4.32		17.42	7.10	5.26	*80.45
VA	4.00	21.30	20.00	3.77	.50	17.42	7.10	5.26	*80.35
TN	4.00	20.91	22.50	8.41	.85	17.42	7.10	5.75	*87.94

* Annotates the carriers rate per hundred weight that was filed with MTMC. This is not the low rate carriers rate. The low rate carrier will vary from state to state.
** Annotates the line-haul charges per hundred pounds of HHGs from origin to POE.
*** Annotates the line-haul charges per hundred pounds of HHGs from POD to final destination.
**** Annotates the total charges per hundred pounds of HHGs moved from origin to destination.

Figure 5. Carrier Rate Filing Breakout.
Source: Excerpt from, United Van Lines 1994 Rate Filing, World Headquarters, Fenton, St Louis Co., MO. 1995.

Advantages of Loose Stow

a. Less Expensive. This type shipment can save up to 30 percent of the cost over the standard code 4 method. The calculations on the following pages show the difference in handling cost for a typical code 4 shipment compared to a loose stow seavan shipment

b. Better Transit Service. These shipments validate that loose stow shipments require less transit time than the code 4 method.

Transit time can be reduced 40 percent using loose stow verse code 4 shipment methods.

c. Less Handling. Loose stow shipments are handled once at origin and once at destination. Compare this to a code 4 shipment in which the HHGs or the type II containers are handled nine times before they finally reach destination.

d. Less Costly. "If the loose stow method was used a savings of up to 31 percent could be obtained."[4] In FY93 the cost to the DOD for international shipments was $574 million. If this cost was reduced by 31 percent it would mean a savings in excess of $177 million a year. If this method was used for one out of every five international shipments, it would mean a savings of $33.9 million a year in shipment cost alone.

Some of the items this method eliminates is the cost of the type II containers, overflow containers, rug containers and ocean stuffing charges. The ocean stuffing charge alone is around 25 percent of the total rate filed by carriers. Due to the speed of the containerized shipment the need for an unaccompanied baggage, (code J) shipment can also be eliminated. By adding the code J shipment to the loose stow method, this type of shipment becomes even more cost effective.

e. Improved Visibility. It is much easier to track one, 20 or 40 foot seavan container than ten type II containers halfway around the world. Shipments packed in type II containers always have a chance of getting separated before they are stuffed (loaded) into the seavans at the POE, therefore becoming split shipments. Tracking seavan containers

is made easier by the individual serial numbers assigned to each container.

f. Increased Density. When the Type II container is not used the shipment density factor is increased. This eliminates' the requirement for outsized containers, such as rug crates which are frequently used in code 4 HHG shipments. The following figures reflect the difference in the density factors that can be obtained between type II and loose stow HHG shipments.

"Analysis of 42 seavan containers loaded with HHGs in type II and overflow containers indicated a net weight density of 4.43 lbs per cubic foot of the total seavan container space."[5]

Here is an example of three 40-foot seavan containers packed with type II containers compared to loose stow packing.

Type II Container		Loose Stow HHG		In the same space
4.43 lbs	vs	5.9 lbs	=	25% more HHG moved
4.43 lbs	vs	6.5 lbs	=	32% more HHG moved
4.43 lbs	vs	6.2 lbs	=	28% more HHG moved

The 1979 loose stow report states that "HHGs in type II containers normally obtain a cube utilization factor of about 75 percent."[6] This compares to an 85 percent average for loose stow packing.

Below is an example of six of the 42, 40-foot seavan containers that were looked at throughout the testing of the loose stow method. This chart shows the density factors obtained. See Figure 6, following page.

Container 1	Cube utilization 84%
Container 2	Cube utilization 86%
Container 3	Cube utilization 87%
Container 4	Cube utilization 87%
Container 5	Cube utilization 87%
Container 6	Cube utilization 86%

Figure 6. Container Utilization Percentages.
Source: Special report, Loose Stow HHG Shipment No 1 VIA Seavan, Military Traffic Management Command, Stuttgart, Germany, 1979.

g. Less Loss/Damage. With a higher density pack factor HHG items are immobilized better than in type II containers. A seavan container, while in-transit over the ocean "may travel 70 feet from side to side with each complete roll; as often as seven to ten times a minute."[7] This type of movement causes damage to shipments that are not immobilized properly or have a low density pack factor. Security from theft is another concern. If high value items are packed into the seavan container first, the whole shipment would have to be unloaded before high value items could be pilfered. With type II containers, a thief can easily pull off the top, side, or front panel to get to highly pilferable items which are identified on the service member's inventory.

Mr. Robert H Moore, MTMC, deputy chief of staff for operations, said "About 20 percent of all military moves in the last year ended with a damage claim, which compares to about a 10 percent complaint rate for civilian moves."[8] In a personal telephone interview with United Van Lines claims department, Mrs. Patty Jaycocks, a 26-year employee of the company stated, "The average number of civilian claims is around one out of every nine shipments that United moves."[9]

With a seavan shipment the likelihood of a member's shipment being split apart while in-transit is less likely. After working at MTMC-Europe for 3 years, it is this author's experience that hundreds of split shipments are lost each year because of improper markings or handling of type II containers. The loose stow method eliminates' this problem.

Disadvantages of Loose Stow

Even though the loose stow seavan method may be the answer to many shipping problems, it still has several disadvantages. Here are some of the disadvantages that have been identified when shipping HHGs by the loose stow method.

a. Too Fast. When using the loose stow method, shipments may travel, too, fast and arrive at the next duty station before the service member. In the interim, demurrage must be paid on the shipping container while it waits to be unloaded. The demurrage rates that shipping companies use varies from company to company. The shipping company usually allows so many idle days before charging demurrage. Demurrage is paid by the day and increases the longer the container is kept. Following is an example of how demurrage works:

Container moves from port	3-5 free days
Container awaiting off load	day 6 - 10, 6$ a day
Container awaiting off load	day 11 - 17, 15$ a day
Container awaiting off load	day 18 - 24, 25$ a day

The demurrage rate continues to grow the longer the agent keeps the container. Demurrage charges are passed on to the carriers and are included on their final billing for the shipment. Since demurrage rates

continue to grow, a simple cost analysis can determine which method of shipment is more cost effective to the DOD. There's a point when shipping HHG by this method would cost more than the code 4 method if the demurrage rate continued to grow. The 1979 study on shipments moved by the loose stow method showed, that the average shipment, arrives 15 to 25 days earlier than shipments moved code 4.

b. Quarters Availability. Prior to 1991, timing the availability of quarters to a service member's arrival to any given overseas location was almost impossible. With today's reduction of forces in Europe, this disadvantage has been significantly reduced. Even though, quarters availability has increased it still varies from installation to installation. The availability of quarters in CONUS also varies from post to post and waiting time can be 12 to 18 months. Therefore, on most CONUS installations, two thirds of all service members assigned to the installation reside off post and can in many cases accept immediate delivery of their HHG items.

c. Warehousing. Many current warehouse facilities do not have the space to store 20 and 40-foot seavan containers. While these containers can be stored outside, warehouse yards in Europe are often small and may not be able to handle large quantities of containers during the peak season period, May through September.

d. Small Shipments. This method of shipping HHGs does not accommodate every service member who may be eligible. Partially loaded containers would not be cost effective for shipments to and from overseas locations due to container rate charges. Small shipments are

only beneficial if they are consolidated with other smaller shipments going to the same destination.

Loose Stow Seavan Summary

In 1979, 1988 and 1994 the loose stow method has proven itself to be a successful method of transporting HHGs to overseas locations. Even though this method provides better security of shipments, it may not always meet DOD requirements or the member's needs but should be an option available to the PPSO.

How Do Commercial Shipment Procedures Work?

The commercial relocation market began after World War II with the movement of military troops to strategic points around the world. Over time, commercial HHG relocations have evolved, with major U.S. corporations attracted to overseas countries by tax incentives, lower labor costs, fewer operating restrictions and the need to be closer to the international customer.

Today, there are approximately 3.5 million Americans living in overseas countries (excluding military personnel), with more people leaving our country every day for new assignments.[10] This market of international relocations from the U.S. is relatively open to forwarders who have the knowledge and an aggressive sales program to tap the market.

In today's commercial market "Quality" is more than just a slogan. Companies who can't provide top notch quality service in today's market will not survive.

Commercial HHG Movement Evolution

In the 1960's, the steamship lines introduced the 20 and 40-foot containers in use today, to transport goods around the world. Prior to the 1960's, all freight moved on a "break-bulk" basis. Subsequently, shipments were tendered to the steamship lines loose or palletized and loaded into the hold of the ship or on the upper deck. The commercial carrier was charged for the weight of the shipment or the amount of space occupied on the vessel; whichever, produced the most revenue for the steamship line.

Since then steamship lines have reevaluated the way charges are established for the movement of international freight. Currently, most steamship lines charge a flat container rate regardless if it has 1000 pounds or 40,000 pounds of cargo inside.

Origin Loading

Once the commercial customer is counseled, the HHG company along with the customer, will determine how the shipment will move. For international shipments, the type of container will depend on the size of the shipment and the type of service requested. The most common types of containers are liftvans (type II containers), steamship containers and air cargo.

Generally, liftvans are used for smaller less than container load shipments or when a shipment is destined to storage, in order to minimize handling. Liftvans will also be used for those shipments which are destined for ports that do not have the necessary equipment to handle metal steamship containers, or when shipping to countries where the overland terrain traffic does not permit usage of larger trucks to

move metal steamship containers. Commercial liftvans are no different than the type II container used for military shipments.

Steamship containers come in various shapes and sizes. The most commonly used are the 20 and 40-foot container. These containers are requested by the commercial HHG carrier from the nearest steamship line's container pool. These container pools are located in major metropolitan areas, so availability is not a problem. As in the loose stow method, these containers are married with a chassis called a "bogie." These containers can be delivered directly to the commercial customer's residence or the local packing agent's facility. The local agent has the capability to move the container when needed with tractors.

Once the container is at residence, the packers will load the container in the same manner as a military loose stow shipment. The packing method is no different. Around 75 percent of commercial customers HHG shipments are shipped to overseas locations by this mode.

Shipment Weighing

After the shipment is loaded, the seavan is weighed so the gross weight of the shipment transported in the seavan can be subtracted from the tare weight of the empty container. This will allow the net weight of the packed items to be identified. The customer will pay for the use of the shipping container. With loose stow shipments, charges are passed to the DOD. Once the shipment weight is obtained, the container is line-hauled to the POE where the container will be removed from its chassis for placement aboard the vessel.

Overseas Movement

Once loaded on the next available vessel, the shipment is moved to the POD where it will be off loaded and married with a bogie for onward movement to the agent's facility.

Delivery

The shipment is delivered by line-haul to the customer's residence for immediate off load. If the customer can not accept delivery of the HHGs for any reason and does not want to pay demerge on the shipping container, the shipment is off-loaded into the agent's warehouse. Usually, items off-loaded are placed into liftvans for security reasons. If delivery can be made, the container is unloaded and returned to the nearest steamship container pool yard. Any loss or damage discovered in the shipment will be settled by the customer's personal insurance company or insurance policies obtained from the carrier before shipping.

Commercial Summary

In order for the commercial industry to continue to ship HHG shipments to overseas locations with the least amount of loss and damage, the industry has adopted the use of containerized shipments from origin to destination when possible. The military loose stow method is patterned after the commercial industry because it has been proven successful, saving money, resources, and time.

Security

How are code 4 shipments Secured

As of this research, the following applies to all code 4 shipments. All containerized HHG external shipping containers will be sealed at the origin pickup point with accountable seals. The seal currently being used is a vinyl/paper seal. Four seals are required for each HHG container. These seals should secure the access overlap door and side panels. "Seal numbers are recorded on the inventory, either beside the container number or annotated by individual container number on the last page of the inventory."[11]

Is this enough to secure HHG shipments from pilferage while moving thousands of miles and several transportation modes? In January 1993 numerous PPSOs "expressed concern with the recent increase in high value thefts of personal property suffered by military members in Germany, CONUS, and elsewhere."[12]

In an effort to reduce the theft problems occurring in code 4 shipments, United States Army Europe, (USAREUR) instructed their PPSOs in Europe to require all carriers/agents moving Army code 4 shipments, to place four metal bands around all type II shipping containers at residence. USAREUR and United States Air Force Europe (USAFE), reacted to the huge theft problem in two completely different ways.

USAFE was the first to take action to try and stop the tremendous theft problem that had arisen during the height of the reduction of forces from Europe. In October 1992, officials with the U.S. Air Force in Europe stated the command had changed its policy for dealing with carrier/agents responsible for the loss of service member's

household goods. USAFE stated, that they would "suspend contractors when a local transportation office receives reports of losses of $100 or more in a household goods shipment."[13] Firms would remain suspended until the problem was remedied. The new Air Force policy was prompted by two reports of theft of household goods shipments belonging to Air Force officers moving to the States. The value of goods taken in the thefts were estimated at $20,000 and $36,000 respectively.

USAREUR responded differently with the theft of two Army soldier's shipments found for sale at local flea markets in Germany after the goods had been picked up for shipment to the States. In order to try and solve the theft problem, USAREUR officials submitted a proposal to the Department of the Army that would require carriers to place metal bands around household goods containers at the owner's residence. Specifically, the proposal stated that:

> Two bands would be placed horizontally and two vertically on the large crates in which packed boxes are shipped. The request was initially accepted but later rejected after further coordination with MTMC was made.[14]

The banding proposal was the first announced step by the Army in Europe to prevent such thefts but was later rescinded until further coordination could be made with MTMC. Appendix C, page 75 is the complete Stars and Stripes article explaining actions taken by USAFE and USAREUR.

DOD/MTMC Measures Taken to Reduce Losses

In an effort to support the services in Europe and try to reduce the problem of loss and damage occurring in overseas shipments, MTMC proposed then published several new methods for securing HHG

shipments. However, shortly after publication, they rescinded what they had published. The following section entitled, "MTMC Security Guidelines for Reducing Loss/Damage" is MTMCs' initial attempt to reduce the loss and damage problem that was occurring in code 4 shipments to and from Europe.

In March of 93, MTMC amended the International Personal Property Rate Solicitation, Item 441, requiring that all shipping containers (type II) used in codes 4, 5, 6, 8, and T international service between Germany and the Continental United States, be banded and sealed at the origin residence, unless permission to band and seal at the warehouse is given by the origin personal property shipping office. The amendment further stated that, each container would be banded with four 3/4" steel bands, two vertical and two horizontal, clamped/clipped in place and sealed. MTMC stated that sealing would be accomplished by one of three methods chosen by the carrier. The first was, to band the container at the member's residence and to provide a hand held electric engraving tool for the service member to use in signing across the joins of the two horizontal bands. Method two, required the carrier to use banding and non-reversible nails or screws when closing and securing the container door. The third method, required the carrier to place numbered metal seals around four separate intersections of the vertical and horizontal bands. In all methods, bands will not be removed prior to the delivery at destination residence unless required by U.S. customs.

MTMC also planned to revise the Personal Property Traffic Management Regulation, DOD 4500.34R, Appendix A, Tender of Service, to

require the carriers and their agents to report incidents of theft, pilferage, and vandalism of DOD shipments as they occurred.

In May of 94, MTMC sent out another message rescinding the previous banding requirement until further notice was given. As of this thesis, the requirement to band shipments is still not solved and the carriers continue to secure type II containers with four vinyl seals on the corners of the container.

MTMC Security Guidelines for Reducing Loss/Damage

In conjunction with the requirements that were rescinded, the following guidance was distributed in January 1993 to the PPSOs and still remains in effect today.

a. All PPSOs will counsel the member on how to have a safe move. The counselor must cover inventory preparations, placement of high value items into accompanied baggage, consolidation of high value items in a single area of the origin residence for ease of observation prior to packing, monitoring the packing crew as carefully as possible, to call the PPSO for assistance when needed, and inspect property at destination off load and file claims as quickly as possible.

b. PPSOs were instructed to inspect as many shipments as possible and respond quickly to members requests and complaints of unsatisfactory service. Any incidence of theft should be dealt with quickly with immediate suspension of the carrier and/or agent. PPSOs were also instructed to review carrier performance files and identify problem carriers and agents for further inspections and other corrective actions.

c. PPSOs should use the Total Quality Assurance Program (TQAP), to identify unsatisfactory carriers in effort to deter further thefts. Origin PPSOs must act to discipline theft-tolerant and other sub-standard carriers that do not meet the DOD standards of service.

d. When theft is identified, PPSOs should involve base military criminal investigatory agencies, and request an investigation. The Joint Service Personal Property Coordinating Council is reviewing several options in hopes of deterring theft and simultaneously seeking to improve the quality of service.

e. PPSOs should counsel members to seek insurance if desired and should attempt to accommodate members preference for a specific carrier within the traffic distribution rules.

f. When inaccurate reports about DOD programs are carried by News Media and papers, the PPSOs should work with their local supporting DOD Public Affairs office to provide accurate information back to the service member.

Security Measures taken by DOD Carriers

In the summer of 1993 the HHGFAA proposed an additional security method for code 4 shipments to and from Germany. The new method was known as the High Risk Item Protection Program (HRIPP), and was developed to combat the serious problem of loss and damage suffered in HHG shipments during the height of the drawdown. The HRIPP "required the service member to assemble all valuable items into a single area, preferably a separate room, before the day of packing."[15] The purpose of the program was to provide additional security measures and responsiveness to the pilferage problem of readily saleable (high risk)

items from personal property shipments. Items such as Televisions, Stereos, Compact Disc, Video Cassette Recorders, Figurines, and Weapons were just a few items that were considered high risk.

> These procedures were designed to prevent, detect and minimize theft of high risk items by assigning individual responsibility and providing an audit trail for certain packing, inventorying and unpacking operations.[16]

The HRIPP was never fully integrated into MTMCs shipment and storage program. Today, the HRIPP is an option given to the service member prior to shipment to and from Germany. Most service members decline the HRIPP because they feel it clearly identifies high value shipment items to pilferage.

Was this sufficient action taken by MTMC and the carrier industry to reduce the loss and damage problem that was occurring in code 4 shipments? How can a PPSO inspect more shipments, continue to respond to complaints of unsatisfactory performance, and manage the daily flow of in/outbound customers and documentation when the drawdown of forces included the civilian personnel that worked in the PPSO? What good does it do to allow the service member to select his own carrier? Why should the service member have to acquire additional insurance out of pocket to insure that their shipment will be fully reimbursed when damaged or loss occurs?

It is certain that guidance put out by MTMC did little to reduce the problems of loss and damage occurring in code 4 shipments. According to 1992 claims data, the Army and Air Force together had 99,160 shipment claims totalling $64.2 million. In 1993, the numbers jumped to 123,120 shipment claims totalling $87.4 million. That equals

a claims increase of 27 percent with a shipment increase of 20 percent from FY92 to FY93.

When the force reduction started in 1991, the PPSOs in Europe were some of the first elements that were effected. With an increase in outbound shipments that was in some places more than three times the normal average, for some PPSOs it was impossible to monitor the numbers of shipments that were being packed out each day in Europe. Carriers were brought in from other rate areas like England to increase the local PPSOs capability in Germany. With this extra capability, the need for additional quality control personnel was required. Very few PPSOs in Germany received any additional support, therefore, hundreds of thousands of shipments were packed and uploaded before quality control personnel arrived to inspect the shipments. Even the local PPSO at Fort Leavenworth does not have the staff to adequately inspect and control the flow of HHGs during the peak season periods. During peak season, May-September, the one quality control person at Fort Leavenworth will monitor and inspect approximately 2,500 inbound shipments and 2,500 outbound shipments. With this many shipments to monitor, how much time can be spent at each member's residence inspecting the quality of service being provided by the carrier/agent? The service member is the key to a good pack-out, but is only successful if they know what to look for.

If members are allowed to select the carrier of their choice, the best carrier would most likely receive all the business in that particular area. The current traffic distribution record managed by each PPSO does not allow this to happen. Under the current guidelines,

carriers are guaranteed they will receive the proper tonnage in accordance with the rates they filed. Generally, the lower the rate, the more traffic the carrier will receive for that given area or channel. The traffic distribution record is the only means the PPSO has of controlling and ensuring that shipments are distributed correctly. Currently, the carrier of choice method may be applicable for a few members but overall it has no validity. By choosing the carrier they want, the member may perceive that the shipment will arrive with no loss or damage, but in reality nothing has physically changed in the shipment process to ensure that loss and damage will not occur.

Another guideline put out by MTMC was the option of acquiring additional insurance. Not many enlisted soldiers can afford additional, out-of-pocket moving expenses in which there is no reimbursement. The issue is not how much will the members claim be settled for, but why was there loss or damage in the first place. Furthermore, could it have been reduced or eliminated if better security measures were taken during the movement process?

Code 4 Summary

MTMC is working hard to reduce loss and damage occurring in HHG shipments, yet, claims statistics reflect that loss and damage continues to plague our members today. These guidelines express one method that MTMC is employing to reduce current loss and damage rates. After working in the HHG movement field for the past four years, I feel that a more direct attack at the crux of the issue should be taken. A new way to secure shipments which are packed into type II containers must be

identified if this method of shipment is to continue. The following area on commercial industry security measures will give the reader a better understanding of the different ways the commercial industry secures shipments during the movement process.

Commercial Industry Security Measures

The commercial industry takes the issues of security to heart when moving shipments around the world. The firms that do not will not last long in a business that is so competitive.

Commercial insurance corporations claim that 80 percent of all cargo losses are preventable. The commercial industry prudently recognizes that proper efforts taken in preparing, packing and marking shipments have a tremendous influence on the successful delivery of goods. The industry feels that attention to the basic principles and techniques of export packing will help reduce the loss and damage of cargo. See Figure 7.

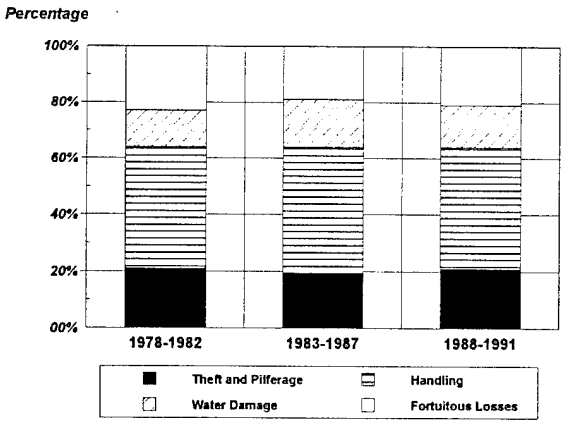

Figure 7. Commercial Industry Losses by Category.
Source: CIGNA, A Guide To Cargo Loss Control, CIGNA Companies, Philadelphia, PA. 1994.

Figures listed in the previous chart are based on a major commercial insurance companies own loss experience and are of a sufficiently large volume of claims to be considered generally representative of the industry. These numbers are based on all industry cargo moved to overseas locations, not just HHGs. The 10 percent commercial HHG loss and damage rate discussed in chapter 4 still applies.

Customer satisfaction and repeat orders are only two of the benefits that stem from a professional approach to HHG shipments. This is unlike the government way of doing business where traffic is awarded to the low rate carrier who may or may not necessarily provide the best quality service. Everyone has heard the saying "you get what you pay for." The industry goal is a "reduction of time and money spent in tracing, locating and making adjustments on lost, damaged or pilfered goods which contribute to a better bottom line."[17]

Industry Tackles Loss and Damage

How does the industry tackle that 80 percent loss rate that is preventable? With roughly one-fifth of all preventable losses attributed to theft, pilferage, non delivery, and damage the following industry guidelines are taken when packing commercial HHG shipments for overseas movement.

Minimizing Loss from Theft Group:

a. The industry uses only new, well-constructed packing material. Deterioration or collapse of flimsy or previously used fiberboard boxes and wood crates during handling or transit invites pilferage through exposure of contents.

b. Use strapping and banding whenever possible. The commercial industry also uses a specifically patterned gummed sealing tape, which enables quick detection of tampering.

c. The use of proper outside container markings so movement will not be hampered due to poor labeling or improper markings is essential.

d. Report losses immediately to insure that, carrier, law enforcement agencies and other appropriate parties respond immediately. Quick action can result in recovery.

e. In addition to the above physical security guidelines, a prompt pick-up and delivery at port facilities will help insure security. The longer a shipment stays in a port facility, staging-marshalling yard, the more it is exposed to loss.

f. Containerized shipments should have the container sealed immediately after loading and after any subsequent openings during transit.

Minimizing Handling and Stowage Damage:

a. Cargo handling equipment and techniques in various parts of the world range from highly professional to unskilled. These conditions alone require the commercial carrier to pack for the "toughest leg of the journey."

b. Do not exceed the rated weight and volume capacity of the packing container.

c. Blocking and bracing should distribute the contents' weight over the entire surface rather than concentrate on one or two critical points. Pack for density when applicable. Shipments that obtain a high

density pack factor are less likely to suffer movement damage from shifting while in-transit. High density pack factors also eliminate the problems of containers bulging and breaking open while being transported from origin to destination.

d. Packing materials should depend on the type of article moved. Articles that do not completely fill the selected package must be cushioned and/or blocked, braced, anchored or otherwise immobilized to prevent damage while in-transit.

Cargo Security Seals

Once the shipment is loaded into the means in which it will be transported, it will be sealed. The most popular seal, usually constructed of polypropylene or galvanized tin plate can be breached and, even re-fitted, with basic tools. Stronger heavy duty cable seals or high security seal locks offer additional protection as they generally deter all but the most determined thief. In addition to deterring physical entry of the container, other desirable properties of seals include:

a. Unique and clearly visible identity.

b. Corrosion- resistance especially for those containers destined for ocean carriage.

c. Tamper-proofing so that it is impossible to re-fit.

d. Strong enough to withstand accidental damage during handling/transit.

Current technology has allowed for several sophisticated variations on these themes. A commercial carrier today can choose from several seal types. There are bar-coded seals that enable automatic

recording of seal numbers, indicator seals that release a bright dye into a transparent casing that is clearly visible from considerable distances and, at least, one manufacturer has developed a seal consisting of randomly set acrylic optical fibers jacketed in a high impact plastic body. These seals each have a unique 'fingerprint' that can be verified by a specially designed camera.

No matter what seal is chosen, its value is compromised if application is not properly supervised and inspected at regular intervals during transit. The commercial industry representatives feel that the effectiveness of a seal is only as good as the control maintained over the sealed inventory. All seals should be stored in a controlled area and released to as few people as practical. In order to establish seal control, a log indicating to whom seals were given must be maintained as a necessary control measure.

Throughout the years, the function of the seal has been to reveal evidence of entry. It can only do its job sufficiently if the organization who placed it there is willing to do theirs. Today's world of global network of satellites and land based terminals enable two-way messaging between a vehicle and a central location. This real time communication and periodic positioning capability has cargo security implications. United Van Lines, one of the largest commercial HHG carriers has employed a system called 'Geo Star' which tracks commercial shipments allowing two-way communications by using satellite technology.

Government vs Commercial

Summary

In looking at the area of security for government vs commercial shipments it is easy to see how complex it can be to secure a shipment while intransit over thousands of miles. The Department of Defense has charged MTMC with a tremendous responsibility in the area of world wide traffic management of DOD HHG shipments.

MTMC continues to improve and search for new ways to improve the security methods that are currently being used today. What better place is there to look than the current technology of the commercial industry. Even though military HHG traffic is a very large commodity and is welcome business by the commercial carrier, it is still only a small piece of the pie when compared to the rest of the normal commercial carriers business. A perfect example is United Van Lines, one of the largest HHG carriers in the United States. United's, government HHG business made up only 8 percent of the company's total revenue received in 1994.

When shipping commercial HHGs the commercial industry has the upper hand on the latest security methods. Yet, with every new security method comes cost. Is the government willing to pay higher prices to secure the currently used type II container? With the current budget cuts, how can we afford to make adjustments to the current system. Chapter 6 gives the author's recommendations on the security systems previously addressed.

Endnotes

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[16]Donald H. Mensch, President HHGFAA, High Risk Items Protection Program Guidelines, 4 March 1994.

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CHAPTER 6

CONCLUSIONS AND RECOMMENDATIONS

Response to The Research Question

This thesis examined the code 4 household goods shipment method to see if the current method could be improved to reduce the loss and damage rate occurring with our service member's shipments. This thesis looked at two particular areas. It compared the current code 4 method to a method known as "loose stow" seavan and the current commercial industry method. This thesis also compared security measures taken on code 4 shipments to the security methods used by the commercial industry.

Research Question: Can loss and damage of code 4 household goods shipment be reduced?

Answer: Yes. This author identified two areas where steps can be taken to reduce the loss and damage occurring in our service members shipments. These ways are discussed in the following conclusions and recommendations.

Conclusion

The use of intermodal containers for the transport of a great variety of cargo has become increasingly popular in recent years. Intermodalism is a concept that embraces the movement and transfer of standardized ocean going containers by sea, air and surface has greatly

reduced cargo handling, particularly in door-to-door shipments. The development of specialized containers with a wide range of types, sizes and configurations permits containerization of almost any cargo, especially household goods.

Prompt, undamaged arrival of the complete shipment at destination is the primary objective of the shipper, be it a container load of computers bound for Germany or SSG John Smith's household goods. Both of these shipments are of equal value to the recipient. By committing household goods to containerized transport, the shipper can reduce losses and damage by:

1. Packing goods to withstand the hazards of the "toughest leg of the journey."

2. Properly describing and documenting the container contents, locking and sealing the container and recording container and seal numbers on all shipping documents.

3. Timely loading/unloading at origin/destination.

4. Reducing the handling of the household goods by up to 60 percent and increasing density pack factors.

The greatest benefits of containerization are realized when the service member uses the container to carry goods directly from his or her origin premises to his or her destination halfway around the world. Perhaps the only time the container will be opened while enroute is for customs' inspection. Reduced susceptibility to pilferage and theft, elimination of multiple handling of individual items or packing containers and the least possible exposure to the elements are all attractive features of the Loose Stow Seavan method.

If the commercial industry moves commercial household goods as well as valuable trade items like electronics with this method how could it not be the most efficient?

As in all areas of the DOD, dollars seem to be the driving factor. With today's declining defense budget the loose stow seavan method will save millions of dollars each year in shipment cost alone. This does not even begin to count the millions of dollars it could save in the claims process. Over the years, the method has been proven to work by commercial industries throughout the world. Even MTMC testing has proven this method to be of considerable cost savings over the past 15 years.

While this method has been proven over and over again it may not be the only answer to the reduction of loss and damage. Not all shipments will meet the requirement to use this method. Therefore, for those shipments that are unable to move by loose stow seavan the security of the type II container must be reconsidered. It is this author's opinion that MTMC must incorporate one of the current industry procedures on securing type II containers or incorporate USAREUR's proposal to band all type II containers when moving between origin and destination. MTMC must force the carrier/agent to do their job by monitoring the shipment while it moves throughout the system, and penalizing those agent/carriers who continue to show poor performance. When a problem is noted (seal broken, bands missing), the red flag must be raised and the question asked, has the shipment been violated?

Between the carrier industry and MTMC a middle road must be found to secure the movement of our service member's household goods shipments.

In today's shrinking Service one must understand the most valuable commodity is the service member. We continue to ask each soldier to deploy worldwide, many times in harms way, only to treat his most prized possession, his family and their belongings, like second class cargo. "Quality does make the difference."

Recommendation

MTMC should incorporate the loose stow seavan method into the current methods available to the PPSO when selecting a shipment method for overseas movement. For those shipments that meet the loose stow requirements, it is definitely the best option available for overseas movement. The program should be expanded to include the service member's car, all in one shipping container. If the commercial industry continues to move civilian commercial household goods in this manner one must assume that it is definitely a method worth further investigation. For reasons outlined in the conclusions of this chapter, this method will significantly reduce loss, damage, claims percentage and cost, save millions in shipping cost and increase customer satisfaction for those who are eligible for this method. At a minimum it should be an option available to the PPSO.

For those shipments that are either too small to be cost effective or fail to meet other requirements, the type II method must be used. If the type II container is used, the current security method must be improved. For securing these containers, metal banding at

residence is the best option to date. Banding must be followed by carrier/agent monitoring the shipment throughout the movement process and halting the shipment when compromise has been noted.

With these two recommendations imposed, I feel that money, time, quality, and security will increase several times over. By increasing the customer satisfaction level of our service member, the DOD will reap the benefits by retaining quality soldiers.

Recommendations for Further Study

Research should be undertaken to determine if other ways exist that could further reduce the loss and damage occurring in household goods shipments. Research into cars shipped in seavan container with the household goods would make the loose stow seavan method even more attractive, saving time and claims of overseas vehicle shipments.

APPENDIX A

COLONEL DICKERSON'S COMMENTS

The ones preceding Number 13 have been sometimes so heartbreaking you are really holding your breath. When I first heard we were to be in on an experimental move to Germany, the first one, I thought well here goes nothing. How little did I know. This was the move of all moves... Seavan. Thirty days, after our household goods were packed out of our home in Virginia they were being placed in our home in Stuttgart Germany. The time could have been even shorter had our house been available sooner.

Damage, with the Seavan method of transporting goods that word can almost be deleted from the Moving Briefing. Lost Articles, with Seavan, that can also be deleted. Another big plus for Sea Van, instead of having a hold baggage and household pickup, everything can go at once. What more can be said? We found it to be the best move we have ever had, we feel that it is efficient and less costly. To a homemaker this means less time spent living out of a suitcase, restaurant meals, getting the children settled quickly in their familiar surroundings and getting on with being a family. It means not having to go out and replace things lost or damaged, finding the least expensive place to have furniture repaired and upholstered, stretching the claim money, which never seems to cover todays prices.

As a taxpayer, this method of moving families has an even bigger meaning. I feel the Seavan move can provide the service member with a good safe move and will cost less money at the same time. For these reasons, I strongly urge this method of moving families be adopted throughout the service.

SIGNED
Chloe H. Dickerson
DW, COL USAF

APPENDIX B

LIEUTENANT COLONEL PATTY'S COMMENTS

I would like to furnish you some feedback on my recent PCS move to Europe. As you know, my personal property was moved using the modified Code 4 method. In my estimate, the move was a complete success. In my estimate, the move was a complete success from every aspect. I would like to provide some comments on what I considered critical areas:

Pre-move survey: Timely and very thorough.

Packing: The packers were the best that I have observed in 20 years of moving. They arrived on time, and were super courteous, well trained, with sufficient materials to do the job. I cannot say enough good things about these gentlemen.

Packing materials: Stand-up wardrobes were used for the clothing. They performed well - none collapsed or failed.. In fact there was probably too much cushioning and packing material used throughout.

Handling: Again, super job. The boxes and crated furniture, i.e., recliner chair, freezer, bikes, etc., arrived looking as if they had not been moved around the block much less overseas.

Delivery: Very timely.

This move has been the best I've experienced, due in large part to use of the Seavan for HHG shipment. A tremendous improvement over the ITGBL and Type II boxes. The container was in-country less than 30 days from the date we were packed. In summary, the use of this system is a step in the right direction, a plus in the "quality of life" program here in USAREUR and should be publicized as such. Thanks for the opportunity to participate and I highly recommend the program be standardized and fully implemented.

SIGNED
J.W. Patty III
LTC, TC
Commanding

APPENDIX C

ARMY FLIP-FLOP: NO BANDS YET FOR HOUSEHOLD GOODS

The Army in Europe has retracted an announcement saying Army-contracted movers are required to place metal bands around shipping containers for household goods at a customer's residence.

A statement announcing measures to prevent theft of personal property was distributed to news media last month but was later retracted by USAREUR, said command spokeswoman Millie Waters. She could not explain the reversal.

However, several community newspapers, bulletins and the American Forces Network had already reported the information.

USAREUR officials have submitted a proposal to the Department of the Army that would require carriers to place metal bands around household goods containers at the owner's residence. Two bands would be placed horizontally and two vertically on the large crates in which packed boxes are shipped.

Also, packing agents would provide an engraving tool for owners to sign the metal bands, Waters said. But the proposal has not yet been approved, she said. The proposed security measures follow reports of substantial thefts of personal property after household good were packed and removed from a residence by government-contracted firms.

In two instances in the past year, one in Bremerhaven, Germany, and one in Nurenberg, Germany, soldiers were surprised to find their own property for sale at flea markets after the goods had been picked up for shipment to the States.

In October 1992, officials with the U.S. Air Force in Europe said the command had changed its policy for dealing with firms responsible for the loss of service members household goods.

USAFE now suspends contractors when a local transportation office receives reports of losses of $100 or more in a household goods shipment. Forms remain suspended until the problem is remedied.

The policy was prompted by two reports of theft of household goods shipments belonging to Air Force officers moving to the States. Official said the value of goods taken in the thefts was estimated at $20,000 and $36,000.

At the time, Waters said the Army in Europe supported the initiatives, but could not say whether USAREUR would adopt the same measures.

The banding proposal is the first announced step by the Army in Europe to prevent such thefts.

Crystal Laureano
Stars & Stripes

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